

**UNITED STATES DEPARTMENT OF COMMERCE****United States Patent and Trademark Office**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/371,648	08/10/99	YANAGIMACHI	R 265036600070

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HM22/0716

EXAMINER

PARAS JR, P

ART UNIT

PAPER NUMBER

1632

DATE MAILED:

19
07/16/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Advisory Action

Application No.

09/371,648

Applicant(s)

YANAGIMACHI, RYUZO

Examiner

Peter Paras, Jr.

Art Unit

1632

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 20 June 2001 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☒ The period for reply expires 5 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ they raise the issue of new matter (see Note below);
- (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____

3. ☐ Applicant's reply has overcome the following rejection(s): _____
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:


Claim(s) allowed: _____

Claim(s) objected to: _____

Claim(s) rejected: 1-8 and 10-21.

Claim(s) withdrawn from consideration: _____

8. ☐ The proposed drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
10. ☐ Other:


ROBERT A. SCHWARTZMAN
PRIMARY EXAMINER

Continuation of 5. does NOT place the application in condition for allowance because: Applicants have not overcome the standing rejection under 103(a), Lavitrano et al taken with Kuretake et al. Specifically, Applicants have argued that neither Lavitrano nor Kuretake have taught that "dead" sperm are able to transfer DNA into the nucleus of an unfertilized oocyte. Applicants have further argued that there is no motivation to combine the teachings of Lavitrano and Kuretake. In response, the Examiner maintains that Lavitrano has taught that foreign DNA can be transferred into egg cells at fertilization via sperm. See Paper No. 15 on page 4. Additionally, Kuretake has taught that a damaged sperm membrane may actually increase the rate of fertilization. As such, an increase in the rate of fertilization may result in an increase in the rate of transgenesis. Thus, establishing a nexus between fertilization and transgenesis. See pages 3-4 of Paper No. 15. Applicants have defined "dead" sperm as sperm having a damaged plasma membrane with an intact nucleus. See page 2 of Paper No. 18. The sperm comprising the damaged plasma membrane resulting in significant increases in the rate of fertilization as described by Kuretake, on pages 789 and 792, meet the defined standards for dead sperm as set forth by Applicants. One of ordinary skill would be motivated to increase the rate of transgenesis by transferring exogenous DNA via membrane-damaged sperm as a correlation has been established between transgenesis and fertilization (see Lavitrano), wherein membrane-damaged sperm increase the rate of fertilization (see Kuretake). Interestingly, as pointed out by the Examiner in Paper No. 15 on pages 3-4, Applicants have used the same argument as the Examiner by asserting that there is a comparable equivalency between live and dead sperm to transfer exogenous DNA into the nucleus of an unfertilized oocyte effectively fertilizing and creating a transgenic. Moreover, Applicants have used references directed to the use of live sperm to create transgenic animals for support .